REMARKS

In the August 16, 2004 Office Action, the Examiner noted that claims 1-4 were pending in the application; objected to claim 3 as identical to claim 2 and rejected claims 1-4 under 35 USC § 102(e) as anticipated by U.S. Patent 6,658,625 to Allen (Reference A). Claims 5-8 have been added and thus, claims 1-8 remain in the case. The Examiner's rejections are traversed below.

The Application

The application is directed to a system which converts requests for information in a database from a format like that illustrated in Fig. 6 to extensible markup language (XML) format with the results of the request returned from the database. The exemplary requests 1-3 shown in Fig. 6 correspond to the XML results shown in Figs. 8A-8C, 10A-11 and 13A-14C, respectively. As illustrated in Fig. 1, the application software 3, XML generation function 4 and XML operation function 5 are all executed by server 2 which accesses database 6 to convert the requests received from browser 1 and produce results that are returned as HTML (including XML) to browser 1. As illustrated in Figs. 7, 9, 12 and 15, pieces of data are collected from tables stored on server 2. The tables contain XML tags and are independent from each other. Respective XML tags are correlated by primary keys.

The Prior Art: U.S. Patent 6,658,625 to Allen

The Allen patent is directed to an apparatus that performs data conversion on client system 100 (Fig. 1) which, as illustrated in Fig. 2, is connected to server 185. On client system 100, application 123 calls data convertor 128 with an identifier of a server program to which data is to be sent. Data convertor 128 sends data to server program 195 after converting any parameters needed into the appropriate type and format, such as data type, data location, data length, character set, usage, parameter parse order, etc. In the disclosed embodiment, the call from the application program is in program called markup language (PCML) and is converted into extensible markup language (XML) by XML parser 125 prior to being sent to server program 195, with reference to PCML document type definition (DTD) 230, PCML data description 124 and, if necessary, PCML serialized 220, all of which reside on client system 100, as illustrated in Fig. 2 and described in column 11.

Objection to Claim 3

In item 1 on page 2 of the Office Action, the Examiner objected to claim 3 as using language identical to claim 2. It is plainly evident that claim 3 does not use identical language,

since it includes the words "information designated in" (claim 3, line 2) prior to the words "the generated requests". Thus, the difference between claims 2 and 3 is analogous to the difference between a relationship that encompasses both direct and indirect addressing (claim 2) and a relationship that specifies indirect addressing (claim 3). Since claims 2 and 3 are not identical, withdrawal of the objection is respectfully requested.

Rejection under 35 U.S.C. § 102(e)

In item 3 on pages 2-3 of the Office Action, claims 1-4 were rejected under 35 U.S.C. § 102(e) as anticipated by Allen. As discussed above, Allen discloses software executed by a client device to convert information into a format accepted by a server and then sending the data to the server. However, the claims are directed to operations performed by a server to accept from client systems "a plurality of kinds of requests" (e.g., claim 1, lines 3-4) for information from a database and using the database to convert the requests into XML, extract information requested and return the results to the client device. The benefits of performing the conversion at the server instead of at the client, as taught by Allen, should be obvious. The solution taught by Allen requires distribution of software to any client device that needs to perform the conversion of data. In typical client/server environments, client devices outnumber servers by one to three orders of magnitude, or more. Thus, the number of copies of programs required to practice the present invention, compared to the client-based conversion taught by Allen, is significantly smaller. As a result, revision of the software to add to the conversions and make other changes, is much easier for server-based data conversion, as taught by the present invention, compared to the client-based data conversion taught by Allen.

The distinctions between the present invention and Allen are expressed in claim 1 in reciting that the conversion is performed by "a function called up from application software ... by referring to a database and returning results of the requests from the database" (claim 1, lines 3-5). There is no suggestion, let alone anticipatory teaching, in Allen of a function that converts requests, accesses a database and returns results of the requests from the database. All that Allen discloses is a data convertor and parser that translate information from one language to another and then sends the information to a server. Nothing was cited or has been found in Allen suggesting that the data convertor is used to process the response from the server. Therefore, it is submitted that claim 1 and claims 2-3 which depend therefrom patentably distinguish over Allen.

Claim 4 has been amended to recite that the program stored on the computer-readable storage medium is used "for controlling a server" (claim 4, line 2) and to add that the program is

used in "returning the information extracted from the database by the request" (claim 4, last line). Therefore, it is submitted that claim 4 patentably distinguishes over Allen for the reasons discussed above.

New Claims

Claims 5-8 have been added reciting details of the method disclosed in the application. Claim 5 recites "converting ... of requests into an extensible markup language format by referring to **the** database" (claim 5, lines 3-4, emphasis added) which is used by the method "for extracting information" (claim 5, line 1). As discussed above, Allen uses information stored on a client device to convert data prior to sending it to a server. If the client device stored the data being requested as well as the information used for conversion of the data, there would be no need to convert the data. Thus, it is submitted that claim 5 patentably distinguishes over Allen.

Claim 6 which depends from claim 5 adds that the "converting is performed in a function called up from application software" (claim 6, line 2) and "returning results in the extensible markup language format from the function to the application software" (claim 6, last two lines). As discussed above with respect to claim 1, there is no suggestion of such a function in Allen. Therefore, claim 6 further patentably distinguishes over Allen.

Claim 7 depends from claim 6 and adds that "the application software and the function are executed by a server having access to the database" (claim 7, lines 1-2). As discussed above with respect to claim 4, Allen does not teach or suggest conversion performed at a server.

Claim 8 depends from claim 7 and adds that "the database stores XML tags in tables, including at least one table indicating at least one relationship between data in independent tables by defining at least one relationship between the XML tags in the independent tables" (claim 8, lines 1-4), as indicated in the examples of the database provided in Figs. 7, 9, 12 and 15. There is no suggestion of storing information in this manner, so that requests can be converted into XML format. Therefore, it is submitted that claim 8 further patentably distinguishes over Allen.

Summary

It is submitted that Allen does not teach or suggest the features of the present claimed invention. Therefore, it is submitted that claims 1-8 are in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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